

# SBARA's Groundplane

MAY 2007 VOLUME 8 ISSUE 5

*The monthly Newsletter of the South Bay Amateur Radio Association*

## President's Shack By Steve KA6S

It has been a very busy April in many ways. The biggest news is the continuing work by several SBARA movers and shakers to organize our first General Theory Class as well as make Field Day happen.

Planning for the General Theory class is just about complete. The professors are polishing off their lesson plans and the students are scheduled to show up every Wednesday of this month at the CERT training facility. We even have several folks arriving on BART! At last count we have 20 folks signed up for the class - many who are already SBARA members.

Just as a reminder, there are two reasons we wanted to hold this class. The first was as a recruitment aide for the club, i.e. to get folks interested in getting active with a great radio club, the second being to aide people in learning more about a great hobby.

We're planning on inviting all class participants down to Denny's at 5280 Mowry in Fremont after the class for a social gathering after the first class. Talk in on 147.015(+). If you can stop by and introduce yourselves to our class participants, we love to see you there. Class end's around 9pm, so we should be making it over to Denny's a little after that.

Field Day planning is coming along. Station Captains have been identified for four stations so far, and Jeffrey Koger will be setting up a CERT/ARES operation co-located with SBARA. Each Station Captain is responsible for their respective stations. We also plan on having an active GOTA station. Should

be fun as usual!

Our meeting this month is on May 11, 2007. The speaker will be Kristen McIntyre, K6WX who will be speaking about Radio Propagation Physics. Kristen will be giving us a more in-depth look at the mechanism radio waves use to move round our globe, and how to predict same!

73 till next month de Steve KA6S

### May Program — Propagation Physics

As amateur radio operators we experience propagation of RF energy first hand. At times this propagation may seem mysterious and strange, however, it can be modeled by our current physical understanding of electromagnetics.

Kristen McIntyre, K6WX, has been interested in radio since she was about 5 years old. She started in Amateur Radio in 1979 getting her ticket while at MIT. Kristen has worked in many diverse areas from analog circuit design to image processing to starting and running an ISP.

She is currently working as a principal investigator at Sun Microsystems Laboratories where she is researching robustness and emergent properties of large distributed computer systems. She is a long time denizen of Silicon Valley and has worked at or consulted for many of the usual suspects. Kristen is an active ham and loves to chase DX on HF with her Elecraft K2 which she built while visiting her mother in Florida. She is an ARRL Technical Coordinator for the East Bay Section, president of the Palo Alto Amateur Radio Assoc., and is active in many local clubs.



## Remembering Our Fallen Heroes



Join your fellow SBARA Hams for dinner at 6 PM Friday evening. We'll meet at Chili Garden on Walnut Avenue. This is a great way to learn about some really cool products and overall good discussions!!



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## SBARA General Theory Class Roundup

SBARA's General Theory Class, A report from the front!

kinds of Energy, Current versus Voltage, etc.

Well - I WAS standing in *front* of the class this last Wednesday night, so the title is technically correct. We had a turnout of 22 eager students ready to partake in the wisdom (or lack there of) available from the professor (yours truly). I can safely say there wasn't a whole lot of yawning going on while I presented the first chapter of the book.

I chose to test my LCD projector Wednesday afternoon, and it's quite broken. That caused a bit of panic while I called around to various folks looking for a replacement. This is where the CERT folks, specifically, Mary Biggs, and Jeff Koger came through. They individually informed me that there was an LCD display available in the training room. Mary got hold of the training officers and made sure that we would have one available for the class.

I did the professorial duties this first week, but I want to thank Al, Bernhard, and Umesh for sharing these duties with me over the next 6 weeks!

Mary came through in another arena as well by providing great refreshments for all who attended.

The class population is a diverse lot. We had several SBARA members in the class (better than half the students) along with 4 gentlemen from Benicia who heard about the class from our illustrious Section Manager.

Classes will be held every Wednesday during the month of May, and the first Wednesday of June. Come on down and visit the class and show the students what a great bunch of people SBARA folks are!

We spent the evening trying to lay the foundation for the rest of the class, i.e. we spoke about basic terminology. Things like Insulators versus Conductors,

73 de Steve KA6S

**Groundplane SBARA Newsletter Copyright 2007 SBARA.....**

The Groundplane is published monthly by the South Bay Amateur Radio Association. Articles and letters are always welcome. The normal deadline for material

is six days prior to the end of the previous month. Articles can be sent by email to:

**Bill, at:**  
[hamradio@comcast.net](mailto:hamradio@comcast.net)

Contact the Editor for details and

submission guidelines. Articles are due the Saturday prior to the monthly meeting.

The opinions expressed in the Groundplane are strictly those of the authors.

# May is Raffle Month - Buy a Ticket, You Could Win!!!

We will be raffling an atomic clock that has features that any ham would like to have in his shack.

Large 12/24 hr display

Clock can be set for any time zone in the world (not just the U.S.)

Indoor/Outdoor temps (wireless)

Sensitive receiver to keep the time correct to the second, etc.

Attached is a jpg of a clock similar to one that we will be raffling. We also have a stainless steel model atomic clock. The winner will get to choose.



## SBARA Treasurers Report

"UPDATE: the SBARA taxes have been completed and filed on Sunday May 6th."

May Program (from Page 1)

Abstract: Propagation Physics (given at Pacificon)

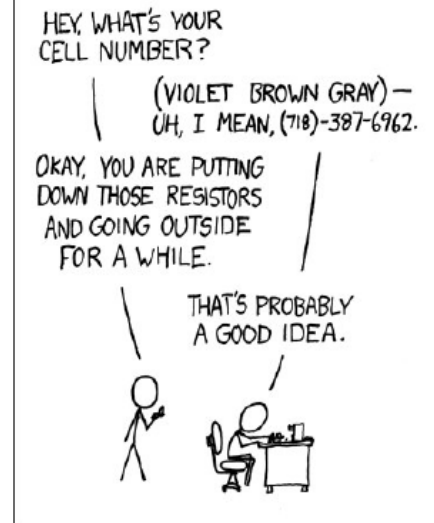
As amateur radio operators we experience propagation of RF energy first hand. At times this propagation may seem mysterious and strange, however, it can be modeled by our current physical understanding of electro-magnetics. This allows us to make some predictions about how propagation will unfold. Our understanding falters when RF energy propagates in environments that are far too complex to contain within the best models we can build. This is when the mystery returns. This talk will explore our physical understanding of propagation,

what factors govern it, and how it interacts with the environment and ionosphere. Amateur radio operators can, using this understanding, make better choices for more efficient RF propagation

## Hayward Zucchini Festival

If you are interested in bringing the entire family, Mike Fung WA6AWI will provide a family pass for any SBARA member who signs up for a shift. If you haven't participated in the past give it a try this year. The festival is close by in Hayward and takes only a few hours of your time. The benefit is enormous for SBARA. Go to [www.sbara.org](http://www.sbara.org) and in the menu bar click on 'Annual Events', then 'Hayward Zucchini Festival' for information and a map to Kennedy Park.

For signing up or if you have any questions, contact Al Rendon at (510) 656-2427 or by e-mail at [wt6k@arrl.net](mailto:wt6k@arrl.net).



## ARES and CERT News and Information

**Thursday, May 17th** at 7:30PM Fremont ARES & CERT CERT Comm will hold its May meeting. The location is 3300 Capitol Building B Administrative Training Room.

Fremont ARES will hold an Equipment configuration session on Saturday May 19th from 9AM - 11AM. Principally this will focus on configuring Fire Department radios and laptops for Packet Radio. Those District Communications Leaders who have not yet received their CERT District equipment should attend to participate and take the equipment home. In addition anyone who would like some more experience with this process should join us. If you have your radio you would like to program bring that and we will help program that too. The location is CERT Central Training Room at 3300 Capitol.

Fremont ARES will hold a Packet Radio training session on Saturday

May 19th. following the session above from NOON till 2 PM. Bring your own equipment to configure and learn packet commands or share Packet radio setups part of the Fremont Fire Departments CERT Program. Packet Radio is simple text messaging using VHF radio and older Windows laptops. If you have an old Windows 98 machine you aren't using, it will make an excellent Packet Station! The location is CERT Central Training Room at 3300 Capitol.

Thursday June 7th is a Class 6 exercise starting at 6:30PM. Any hams wishing to practice their radio use are welcome to join us. Contact Jeff Koger.

Field Day is Friday-Sunday June 22nd — 24th. SBARA will be holding its local event at Lake Elizabeth and all are welcome. Fremont ARES will have a table setup for approximately 4-6 hours to make VHF

& UHF SIMPLEX contacts. We will serve double duty and advertise our emergency operations capability and perhaps a packet setup to any interested passerby and invited officials. This is a good day to spend a few hours with fellow radio enthusiasts and watch them work on long distance bands. It was fascinating to watch last year. If you can commit a couple of hours please contact me via phone or e-mail. Or contact SBARA to join in their plans at [www.sbara.org](http://www.sbara.org)

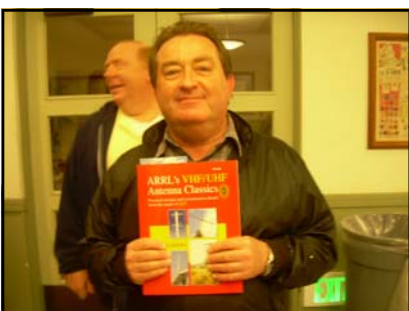


# Happenings

Event Date	Event Name / Description	Website
May 5	<a href="#">Transmitter Hunt - 6:00pm! Fremont</a>	<a href="http://www.thunt.org">www.thunt.org</a>
May 6	<a href="#">Livermore Swap meet</a>	<a href="http://www.livermoreark.org/swap/swap.html">www.livermoreark.org/swap/swap.html</a>
May 11	<a href="#">SBARA Meeting</a>	<a href="http://www.sbara.org/meetings.html#general">www.sbara.org/meetings.html#general</a>
May 12	<a href="#">Foothill Flea Market</a>	<a href="http://www.electronicfleamarket.com">www.electronicfleamarket.com</a>
May 18-20	<a href="#">Dayton Hamvention</a>	<a href="http://www.hamvention.org/">http://www.hamvention.org/</a>
May 19	<a href="#">Transmitter Hunt - Foxes Choice</a>	<a href="http://www.thunt.org">www.thunt.org</a>
June 2	<a href="#">Transmitter Hunt - Fremont -</a>	<a href="http://www.thunt.org">www.thunt.org</a>
June 3	<a href="#">Livermore Swap meet</a>	<a href="http://www.livermoreark.org/swap/swap.html">www.livermoreark.org/swap/swap.html</a>
June 8	<a href="#">SBARA Meeting - Field Day Planning</a>	<a href="http://www.sbara.org">www.sbara.org</a>
June 9	<a href="#">Foothill Flea Market</a>	<a href="http://www.electronicfleamarket.com">www.electronicfleamarket.com</a>
June 16	<a href="#">Transmitter Hunt - Foxes Choice</a>	<a href="http://www.thunt.org">www.thunt.org</a>
June 23-24	<a href="#">Field Day 2007</a>	<a href="http://www.sbara.org">www.sbara.org</a> and <a href="http://www.arrl.org">www.arrl.org</a>
June 30	<a href="#">Transmitter Hunt - Pack A Lunch</a>	<a href="http://www.thunt.org">www.thunt.org</a>



## SBARA Members Enjoying The April Meeting



## SBARA Members - Al and Adam at Old Mission Park





# CERT and ARES News

**ANNOUNCING a Fremont HAM SELF GUIDED STUDY SESSION!!!** On Saturday July 21st from 8AM till 5PM the Bay Area Educational Amateur Radio Society; BAEARS, will offer a ham study session for entry level Technician or upgrade to General class license. MORSE CODE NO LONGER REQUIRED. This session is for Technician and General Classes ONLY. Expert or Morse Code is not being covered or tested for. To reserve a spot for this session register at [www.baears.com](http://www.baears.com). Contact Ross Peterson 650-349-5349 or [wb6zbu@arrl.net](mailto:wb6zbu@arrl.net).

**Saturday, July 28th.,** the Fremont Fire Department CERT Program will be holding an all day - all districts drill for CERT members. CERT members will be provided the chance to come when they want to participate and will last from morning till late afternoon. Radio support for this event will be requested. More information will be distributed as it comes available.

You may be aware that for the past few months the N6OXR (146.940- PL123.0) has been off the air. This is the Fremont ARES/CERT Tactical Repeater for emergency ops. This evening during the Tri City ARES weekly net, the WA6PWW VHF & UHF repeaters went down as well. This VHF repeater is the Resource repeater for shared use with Union City, Newark and Fremont to check in with your availability for assign-

ment. It appears to be a simple power failure issue and we hope it returns to service shortly. On tonight's net out of 8 participants only 2 responded on the output frequency (147.015) after the repeater failed. Either the other 6 left the net or didn't know how to transition to 147.015 SIMPLEX (the output frequency). This is a reminder to us all that we encourage emergency responders to program their radio(s) with the frequencies listed on the attached file at a minimum. Then if the repeater fails as tonight simply tuning to the output frequency (in this case the repeater is Channel 1, the output of that repeater is Channel 2) would allow uninterrupted contact. Then your only consideration is if your radios power and position in Fremont can make contact with another station. This is something we can do at the May 19th class. At this time we request that for all ARES or CERT operations that volunteers use the output frequencies (SIMPLEX) of these two repeaters and do not use other repeaters in the area. There are also pre-selected SIMPLEX frequencies assigned to each CERT district and you can obtain this from your districts communications leader.

Jeffrey Koger  
Fremont EC  
KG6NEB  
(510)693-6736  
[KG6NEB@ARRL.NET](mailto:KG6NEB@ARRL.NET)

## ARRL Membership Reminder

ARRL Affiliated Clubs receive a commission for every new ARRL membership and renewal they submit to ARRL Headquarters. Clubs retain a portion of the dues for each regular or senior membership submitted to ARRL Headquarters:

- **Clubs retain \$15 for each new membership OR lapsed membership (of two years or more).**
- **Clubs retain \$2 for each renewal. A RENEWING MEMBER can renew at anytime, even before their current membership term expires.**



**South Bay Amateur Radio  
Association**  
Founded 1974  
Mailing Address  
Box 8377  
Fremont, Ca. 94537-8377  
Web Site — [www.sbara.org](http://www.sbara.org)

**President**

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AF6YL and KI6DIL

**Board Members at Large**

Lloyd Hartshome, N6DOK  
Sam Severs, WS6S

**Fremont Repeaters & Net Information**

WA6PWW - 147.015 +600Khz, PL 103.5

WA6PWW - 223.900 -500Khz, PL 107.2

WA6PWW - 442.600 +5Mhz, PL 107.2

N6OXR - 146.940 -600Khz, PL 123.0

N6OXR - 441.525 +5Mhz, PL 123.0

ARES - Tuesday @ 7:30pm - 147.015 + PL 103.5

CW - Tuesday & Thursday on 75 meters—3.880  
& on 10 Meters at 28.400 MHz, @ 8:30 p.m.

The [South Bay Amateur Radio Association](http://www.sbara.org) is a general interest amateur radio club serving the Fremont Tri-City area. The club has been in existence since 1974, and has functioned continuously ever since. We are an ARRL Special Service Club, an California not-for-profit tax exempt organization as specified in IRS Statutes. We sponsor training for

new hams, license examination sessions, and participate in various public service events. If you have a specialized amateur radio interest, chances are you can share it with one or more of our club members.

SBARA meets on the 2nd Friday of every month at the Veterans Hall in Niles (Fremont), California. The meeting begins at 7:30

PM. After conducting business, coffee and snacks are served while we socialize. Following the break, a program of interest will be presented. All persons interested in amateur radio are invited to attend. Families are welcome. We hope to see you there!

For those who would like to upgrade their licenses, here's an alternative testing opportunity. The Silicon Valley VE Group has scheduled regular test sessions every alternate Saturday morning at the HP facility in Cupertino. The ARRL site shows the following info for this Saturday, information:

\*Sponsor: \* SILICON VALLEY VE GROUP

\*Time: \* 8:00 AM (Walk-ins allowed)  
\*Contact: \* MORRIS E JONES  
(408)507-4698  
\*Email: \*  
AD6ZH@ARRL.NET  
<mailto:AD6ZH@ARRL.NET>  
\*VEC: \* ARRL/VEC  
<<http://wireless.fcc.gov/services/amateur/licensing/vecs.html>>  
\*Location: \* HEWLETT PACKARD  
19333 VALLCO PKWY  
BLDG #2  
TESTS START BETWEEN 8-10:30AM

MAP N37 19.490  
W122 00.568  
CUPERTINO, CA 95014

In addition, these sessions are planned every two weeks through at least the end of May (March 17, April 7, April 21...).



**Club Classifieds**

**List your items  
for sale or trade  
here.**

Let other club members know about the gear you wish to sell, trade, need, etc. Send your info to [BB.Arrl@WB9YVM](mailto:BB.Arrl@WB9YVM) before the 15th of each month to get it in the next month's newsletter. Limit your classified to 25 words or less. Ham Radio, Computer, or electronic related items only please. Listings are posted for 1 month, resubmit for additional months. Listings are first-come-first-serve, limited to space available. We reserve the right to edit content.

**ANAHEIM, CA**

(Near Disneyland)  
933 N. Euclid St., 92801  
(714) 533-7373  
(800) 854-6046  
Janet, KL7MF, Mgr.  
anaheim@hamradio.com

**BURBANK, CA**

1525 W. Magnolia Blvd, 91506  
(818) 842-1786  
(800) 854-6046  
Eric, K6GHT, Mgr.  
Magnolia between  
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burbank@hamradio.com

**OAKLAND, CA**

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(510) 534-5757  
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Mark, W17YN, Mgr.  
I-880 at 23rd Ave. ramp  
oakland@hamradio.com

**SAN DIEGO, CA**

5375 Kearny Villa Rd., 92123  
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(800) 854-6046  
Tom, KM6K, Mgr.  
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(800) 644-4476  
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Tigard-99W exit  
from Hwy. 5 & 217  
portland@hamradio.com

**DENVER, CO**

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(800) 444-9476  
John, N5EHP, Mgr.  
denver@hamradio.com

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1939 W. Dunlap Ave., 85021  
(602) 242-3515  
(800) 444-9476  
Gary, N7GJ, Mgr.  
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phoenix@hamradio.com

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atlanta@hamradio.com

**WOODBIDGE, VA**

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14803 Build America Dr. 22191  
(703) 643-1063  
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woodbridge@hamradio.com

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(Near Boston)  
224 N. Broadway, 03079  
(603) 898-3750  
(800) 444-0047  
Chuck, N1UC, Mgr.  
sales@hamradio.com  
Exit 1, I-93;  
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- Backlit Front Key Panel

**Low Intro Price!****TH-D7A(G)** 2M/440

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- APRS Compatible
- DX Packet Cluster Monitor
- 200 Memos., CTCSS
- VC-H1 Messaging Control

**Low Pricing!****TM-D700A** 2M/440 Dualband

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The Store Nearest To You!**YAESU****VX-7R**

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- Li-Ion Battery
- Fully Submersible to 3 ft.
- Built-in CTCSS/DCS
- Internet WIRES compatible

**Great Price!****FT-857D**

- Ultra compact HF, VHF, UHF
- 100w HF/6M, 50w 2M, 20w UHF
- DSP included • 32 color display
- 200 mems • Detachable front panel (YSK-857 required)

**Call for Low Price!****FT-2000** HF + 6M tcvr

- 100 W w/ auto tuner
- built-in Power supply
- DSP filters / Voice memory recorder
- 3 Band Parametric Mic EQ
- 3 IF roofing filters

**Call Now For Low Pricing!****IC-706MkIIG** HF/VHF Transceiver

- All mode HF/6M/2M/70CM
- 100W HF/6M, 50W/2M, 20W/440 MHz
- AF-DSP • Plug and Play Filters - No Soldering
- Easy-to-Navigate menus

**Low Pricing!****IC-756 PRO III** All mode Transceiver

- 160-6M @ 100W • Enhanced Rx performance
- 32 bit IF DSP • SSB/CW Synchronous tuning
- Enhanced 5 inch color TFT w/spectrum scope
- Selectable IF filter shapes for SSB & CW
- Multiple DSP controlled AGC loops
- Advanced CW functions
- 101 alphanumeric memories

**The Ultimate Radio!****DJ-196T** 2M/HT

- 5 Watt out
- 40 memories
- Alphanumeric display
- CTCSS + DCS built in
- "S" meter
- Auto Dialer

**Low Pricing!****DR-135TP** 2M mobile

- 50 Watt out • Alpha numeric display
- 100 mems • Built-in TNC 1200 & 9600 Baud
- Front Panel GPS in • Rear DB-9 port
- CTCSS/DCS Encode/Decode built in

**Low Pricing!**



# Announcements

SBARA monthly meeting is May 11th.  
Our program will be Propagation Physics  
Presented by Kristen McIntyre  
Veterans Hall in Niles

SBARA FIELD DAY RAFFLE		
JUNE 23RD, 2007 - CENTRAL PARK - FREMONT		
FIRST PRIZE - ELECFRAFT K2 - 15 WATT VERSION FULLY ASSEMBLED		
DONATION: \$10.00 EACH OR 3 FOR \$20.00		
RAFFLE LIMITED TO 300 TICKETS		
WINNER NEED NOT BE PRESENT TO WIN		

NAME: \_\_\_\_\_  
CALL SIGN: \_\_\_\_\_  
PHONE: \_\_\_\_\_

Sample

**Come to the Monthly Meeting & Bring a Friend!!**

The Ground Plane — KU6S  
<http://www.sbara.org>  
South Bay Amateur Radio Association — SBARA  
P.O. Box 8377  
Fremont, Ca. 94537-8377